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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/282,860 03/31/99 BREZIN

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IBM CORPORATION  
INTELLECTUAL PROPERTY LAW DEPT  
PO BOX 218  
YORKTOWN HEIGHTS NY 10598

EXAMINER

FLEURANTIN, T

ART UNIT PAPER NUMBER

2172

DATE MAILED:

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

**Commissioner of Patents and Trademarks**

## Office Action Summary

Application No. 09/282,860	Applicant(s) Jonathan P. Brezin et al.
Examiner Jean Bolte Fleurantin	Art Unit 2172

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE three MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1)  Responsive to communication(s) filed on \_\_\_\_\_.
- 2a)  This action is FINAL. 2b)  This action is non-final.
- 3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

### Disposition of Claims

- 4)  Claim(s) 1-41 is/are pending in the application.
- 4a) Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5)  Claim(s) \_\_\_\_\_ is/are allowed.
- 6)  Claim(s) 1-41 is/are rejected.
- 7)  Claim(s) \_\_\_\_\_ is/are objected to.
- 8)  Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9)  The specification is objected to by the Examiner.
- 10)  The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.
- 11)  The proposed drawing correction filed on \_\_\_\_\_ is: a)  approved b)  disapproved.
- 12)  The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. § 119

- 13)  Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

a)  All b)  Some\* c)  None of:

- Certified copies of the priority documents have been received.
- Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
- Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\*See the attached detailed Office action for a list of the certified copies not received.

- 14)  Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

### Attachment(s)

- 15)  Notice of References Cited (PTO-892) 18)  Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 16)  Notice of Draftsperson's Patent Drawing Review (PTO-948) 19)  Notice of Informal Patent Application (PTO-152)
- 17)  Information Disclosure Statement(s) (PTO-1449) Paper No(s). 3 20)  Other: \_\_\_\_\_

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## **DETAILED ACTION**

1. Claims 1-41 are presented for examination.

### ***Drawings***

2. This application has been filed with informal drawings which are acceptable for examination purposes only. Formal drawings will be required when the application is allowed.

### ***Claim Rejections - 35 U.S.C. § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-41 are rejected under 35 U.S. C. 103 (a) as being unpatentable over Paul (US Pat. No. 6,052,709).

As per claims 1 and 40, Paul substantially teaches a method to optimize information retrieval based on communication relationships as claimed, comprises the steps of extracting and integrating relationship information from multiple heterogeneous information sources (thus, if the data in any of the field of the incoming email message match data stored in the corresponding data category of the exclusion list manager the email is marked by the filter with a first display code indicating the junk status of the message, which is readable as extracting and integrating relationship information from multiple heterogeneous information sources) (see col. 6, lines 44-50);

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modifying a query based on the relationship data structure (thus, filtering may also be based on the contents in the body of the email, the user exclusion list may automatically created and maintained and created and modified manually by the user or service provider; which is equivalent to modifying a query based on the relationship data structure) (see col. 6, lines 7-16). But, explicitly Paul does not indicate the step of building and storing a relationship data structure to represent the relationship information. However, implicitly Paul shows the step of the data in any of these fields of the incoming email matches data stored in a corresponding field of the inclusion list processor the incoming email is marked junk and marked with a first display code if no match is detected the email filter labels the email message as junk by marking the message with a second display, the email filter interacts with the email message store that processes the email and performs other known functions for multiplicity of email addresses or accounts, the exclusion list processor may store an exclusion list for each email address or alternatively an exclusion list for each group of email addresses organized by domain or other group; which is readable as building and storing a relationship data structure to represent the relationship information (see cols. 8 and 9, lines 55-67 and 1-17). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the teaching of Paul with the step of building and storing a relationship data structure to represent the relationship information. This modification would allow the teachings of Paul to improve the accuracy and reliability of the optimization of system performance based on communication relationship, and provide centralized management of account information (col. 9, lines 20-21).

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As per claim 2, Paul substantially teaches a method as claimed, wherein said step of modifying a query comprises the steps of prioritizing and filtering the retrieval of related information (thus, receiving email from specific sources or email messages including certain subject matter by adding source data and subject data to the filtering application exclusion lists, which is readable as wherein said step of modifying a query comprises the steps of prioritizing and filtering the retrieval of related information) (see col. 9, lines 50-53).

As per claims 3 and 4, Paul substantially teaches a method as claimed, wherein said step of modifying a query comprises the steps of augmenting information from the heterogeneous information sources (thus, receiving email from specific sources or email messages including certain subject matter by adding source data and subject data to the filtering application exclusion lists, which is readable as the steps of augmenting information from the heterogeneous information sources) (see col. 9, lines 50-53).

As per claim 5, Paul substantially teaches a method as claimed, wherein the heterogeneous information sources are selected from the group consisting of one or more of: people-managed data sources; organization charts; mailing lists; calendar entries; personal address books; priority lists of contacts; and automated system log type information including phone logs and e-mail logs (thus, method and system for controlling delivery of unsolicited electronic mail messages one or more spam probe email addresses are created and planted at various sites on the communications network in order to insure their inclusion on large scale electronic junk mail mailing lists; which is equivalent to wherein the heterogeneous information sources are selected from the group

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consisting of one or more of: people-managed data sources; organization charts; mailing lists; calendar entries; personal address books; priority lists of contacts) (see abstract, lines 1-20).

As per claim 6, Paul substantially teaches a method as claimed, further comprises the step of assigning different preferences to the heterogeneous information sources (thus, the filtering system email messages marked with the first display code are further processed by the filter using user preference data entered by the user, which is readable as assigning different preferences to the heterogeneous information sources) (see col. 7, lines 16-33).

As per claim 7, Paul substantially teaches a method as claimed, further comprises the steps of: said step of building a data structure further comprising the step of tracking communication intensities between each pair of communication entities via each information source (thus, the filter application compares the subject data of the received email message with subject preference data entered by the user, which is readable as tracking communication intensities between each pair of communication entities via each information source) (see col. 7, lines 21-36);

integrating the relationship information from the heterogeneous information sources, in response to said tracking step (thus, if a match is detected the email message is marked with a third display code and displayed to the user in a third distinctive mode using known display techniques, which is readable as integrating the relationship information from the heterogeneous information sources, in response to said tracking step) (see col. 7, lines 31-33).

As per claims 8 and 9, Paul substantially teaches a method as claimed, further comprises the step of: deriving a relation-group for each communication entity based on a pre-specified

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criterion on said communication intensities (thus, determine whether the subject data from the received message contain any words or phrases matching the subject information describing each predetermined category, which is equivalent to deriving a relation-group for each communication entity based on a pre-specified criterion on said communication intensities) (see col. 7, lines 41-46).

As per claims 10 and 13-14, Paul substantially teaches a method as claimed, further comprises the step of: computing an aggregate communication intensity from an entity A to an entity B based on a weighted sum of the communication intensities from said entity A to said entity B via each information source (thus, the source data extracted from the alert signals are automatically added to the stored exclusion list, processed by the control center; which is readable as computing an aggregate communication intensity from an entity A to an entity B based on a weighted sum of the communication intensities from said entity A to said entity B via each information source) (see figure 4, col. 6, lines 17-25).

As per claims 11 and 32, Paul substantially teaches a method as claimed, further comprises the steps of: assigning a weight to each information source based on a preference (see col. 6, lines 28-33);

computing the aggregate communication intensity, based on the weight and the preference (thus, the filter application compares the subject data of the received email message with subject preference data entered by the user, which is readable as computing the aggregate communication intensity, based on the weight and the preference) (see col. 7, lines 15-33).

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As per claim 12, Paul substantially teaches a method as claimed, further comprises the step of: deriving relation-group entities of an entity allowing one or more of an indirect relationship and an inferred relationship (see col. 4, lines 35-46).

As per claim 15, Paul substantially teaches a method as claimed, further comprises the step of: building and maintaining additional persistent data structures based on the results of the query to facilitate the response on future queries, based on the relationship data structure (see col. 4, lines 47-67).

As per claim 16, Paul substantially teaches a method as claimed, wherein the additional persistent data structure can be a personal address/phone book based on the communication intensity (see col. 4, lines 22-29).

As per claims 17 and 18, Paul substantially teaches a method as claimed, further comprising the step of determining a significance of a relationship between two entities (thus, the filtering application receives the alert signal updates stored filtering data upon receipt of the alert signal using the source data and filtering instructions retrieved from the alert signal, and filters electronic mail messages addressed to each of the user terminals in accordance with updated filtering data; which is readable as determining a significance of a relationship between two entities) (see col. 2, lines 42-47).

As per claims 19-21, Paul substantially teaches a method as claimed, wherein the tracking step can be subject based (see col. 5, lines 10-20).

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As per claim 22, Paul substantially teaches a method as claimed, further comprising the step of downloading information based on the significance of the relationship (see col. 3, lines 6-9).

As per claim 23, Paul substantially teaches a method as claimed, further comprising the step of resolving name ambiguity by using the relationship from the heterogeneous information sources to determine one or more of an e-mail address, phone number, and a full name (see col. 4, lines 22-34).

As per claim 24, Paul substantially teaches a method as claimed, further comprises the step of recommending a communication channel based on a recipient characteristic (thus, processor may also extract and analyze data from other fields of the received email message including other header fields, which is readable as recommending a communication channel based on a recipient characteristic) (see col. 5, lines 10-20).

As per claim 25, Paul substantially teaches a method as claimed, further comprising the step of caching a document and information based on the significance of the relationship (thus, the source data extracted from the alert signals are automatically added to the stored exclusion list, which is readable as caching a document and information based on the significance of the relationship) (see col. 6, lines 19-21).

As per claims 26-29, Paul substantially teaches a method as claimed, further comprises the step of detecting inconsistency among data in the heterogeneous information sources (thus, the control center includes a distributor for distributing a probe address to multiple sites on the

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communications network likely to be accessed by mailers of unsolicited electronic mail, which is readable as detecting inconsistency among data in the heterogeneous information sources) (see col. 2, lines 25-49).

As per claim 30, Paul substantially teaches a method as claimed, further comprises the steps of: integrating the relationship information from the multiple heterogeneous sources using a graph wherein each node represents a communication entity, and a link between a pair of nodes represents the existence of a communication relationship between the two nodes (see figure 1, cols. 3 and 4, lines 59-67 and 1-34).

As per claim 31, Paul substantially teaches a method as claimed, further comprises the step of labeling each link with a communication intensity vector, where each dimension of the communication intensity vector represents a communication intensity from an information source (thus, the processing performed by processor may include analysis of the source header data from the received email message in order to determine the address of the sender or address of the servers relaying the email message from the sender to the spam probe mailbox, and alert signal generator preferably then transmits the alert signal to each server either via an optional dedicated communication link or via communications network; which is readable as labeling each link with a communication intensity vector, where each dimension of the communication intensity vector represents a communication intensity from an information source) (see col. 5, lines 10-32).

As per claim 33, Paul substantially teaches a method as claimed, further comprises the step of obtaining relevant information from the heterogeneous information sources, said information

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selected from the group consisting of one or more of: phone numbers; e-mail addresses; mailing addresses; office location; department; or manager, from various information sources (thus, method and system for controlling delivery of unsolicited electronic mail messages one or more spam probe email addresses are created and planted at various sites on the communications network in order to insure their inclusion on large scale electronic junk mail mailing lists; which is equivalent to said information selected from the group consisting of one or more of: phone numbers; e-mail addresses; mailing addresses; office location; department; or manager, from various information sources) (see abstract, lines 1-20).

As per claims 34 and 36, the limitations of claims 34 and 36 are rejected in the analysis of claims 11 above, and these claims are rejected on that basis.

As per claim 35, Paul substantially teaches a method as claimed, further comprising the step of calculating a communication intensity based on both a number of communication events and their temporal characteristics (thus, the filter application compares the subject data of the received email message with subject preference data entered by the user, notably the subject data from the received message may include subject header information the full text of the email message or both; which is readable as calculating a communication intensity based on both a number of communication events and their temporal characteristics) (see col. 7, lines 23-36).

As per claims 37 and 38, Paul substantially teaches a method as claimed, further comprises the step of modifying the query to create one or more sub-queries (see col. 8, lines 37-41).

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As per claim 39, Paul substantially teaches a method as claimed, further comprises the step of excluding results from the sub-queries (thus, once the information contained in the received email message is identified and received by processor, processor analyzes this information using processing methods known in the art and extracts the source header data from the received email message; which is readable as excluding results from the sub-queries) (see col. 5, lines 1-5).

As per claim 41, Paul substantially teaches a method as claimed, further comprises the step of prioritizing and filtering a list of name to e-mail address mapping to facilitate sending e-mail (thus, the filtering system controls delivery of unsolicited email messages by discarding the messages without displaying them to the user, the filtering system may also be used to filter email messages sent from the user terminals; which is readable as prioritizing and filtering a list of name to e-mail address mapping to facilitate sending e-mail) (see col. 2, lines 17-24).

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Breese et al. US Pat. No. 6,006,218 retrieving information as a function of a user's estimated knowledge.

*Conclusion*

5. Any inquiry concerning this communication from examiner should be directed to Jean Bolte Fleurantin at (703) 308-6718. The examiner can normally be reached on Monday to Friday from 7:30 A.M. to 6.00 P.M.

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If any attempt to reach the examiner by telephone is unsuccessful, the examiner's supervisor, Mrs. KIM VU can be reached at **(703) 305-8449**. The FAX phone number is **(703) 305-9731**.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone is **(703) 305-9600**.

JBFleurantin

Jean Bolte Fleurantin

June 27, 2001

JBF/



KIM VU  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100